1 Flash STM32F103C8 using USB2UART

1.0.1. Make connections as shown in Table 1.0.1.1 and modify the circuit accordingly

STM32F103C8 PINS	USB2UART PINS
3.3	3.3
GND	GND
A9(TXD)	RXD
A10(RXD)	TXD

Table 1.0.1.1

1.0.2. Create a src folder and inside src folder, create a source code in c/c++ which has to be flashed into stm32f103c8 (for example: src/blink.c).

1.0.3. Create a platformio.ini file by adding the lines

```
[env:bluepill_f103c8]
platform = ststm32
board = bluepill_f103c8
framework = stm32cube
upload_protocol=serial
upload_port=/dev/ttyUSB0
upload_speed=115200
```

1.0.4. Before flashing, make sure that stm32 board is in bootloader mode.

1.0.5. To make the stm32 board into bootloader mode, by setting the BOOT0 pin of stm32 board to LOW (connected to GND). This configuration will ensure that the microcontroller enters the system memory bootloader on reset.

1.0.6. After executing

```
pio run -t upload
```

The inbuilt LED present on the stm32f103c8 will start blinking.

1.0.7. After flashing, the inbuilt LED present on the stm32f103c8 will start blinking and then remove the BOOT0-GND connection after you have completed the bootloader operations and can run your code from the main flash memory.